

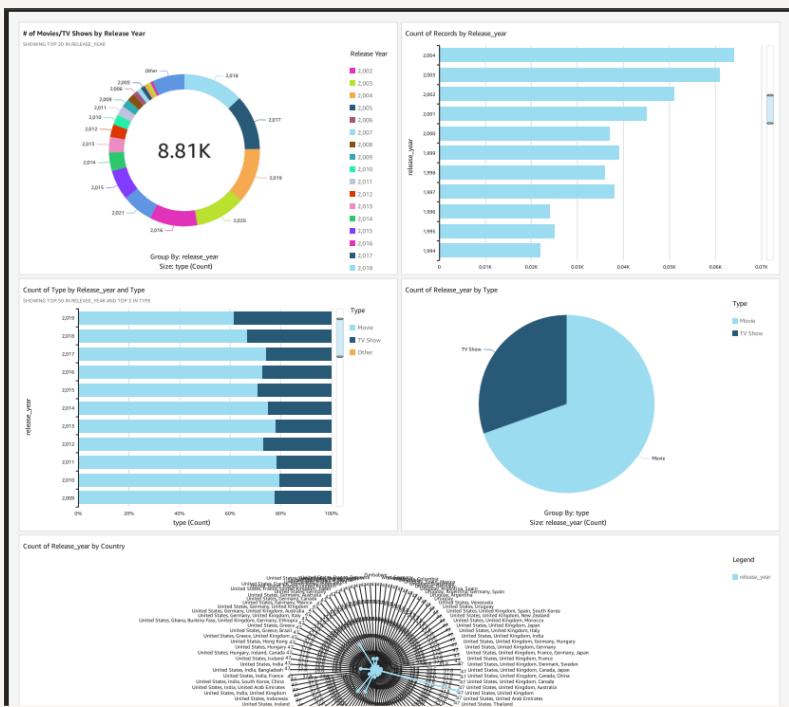


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# Visualize data with QuickSight



KILLIAN





# Introducing Today's Project!

In this project, I will demonstrate how to upload, connect, visualize, and publish data insights using Amazon Web Services (AWS), specifically focusing on S3 and Amazon QuickSight.

## Tools and concepts

In this project, I learned how to use Amazon S3 for data storage and Amazon QuickSight for visualizing datasets. I also understood the role of a manifest.json file, how to grant IAM permissions, and how to apply filters and visualizations for insight

## Project reflection

It took me approximately 2 to 3 hours to complete the entire project, including setting up the S3 bucket, configuring permissions, uploading the manifest, building visualizations in QuickSight, and finalizing the dashboard.

After this project, I plan to work on analyzing e-commerce sales data using Amazon QuickSight and Athena to uncover customer trends and optimize inventory decisions. I will start this project on Monday, June 3, 2025.



# Upload project files into S3

Amazon S3 stores two files in this project: netflix\_titles.csv and manifest.json. The CSV file contains the Netflix data, while the manifest file tells QuickSight how to read the CSV.

I edited the `manifest.json` to add the correct S3 path to the `netflix\_titles.csv` file. This helps QuickSight locate and understand the data format for proper import and visualization from the S3 bucket.

The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with the AWS logo, search bar, and various links like 'QuickSight', 'IAM', and account information ('United States (N. Virginia)', 'Killian'). Below the navigation is a breadcrumb trail: 'Amazon S3 > Buckets > nextwork-quicksight-killian'. The main area is titled 'nextwork-quicksight-killian info'. Underneath, there are tabs for 'Objects', 'Metadata', 'Properties', 'Permissions', 'Metrics', 'Management', and 'Access Points'. The 'Objects' tab is selected. A sub-header 'Objects (2)' is displayed. A message below it says: 'Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)'. There's a search bar labeled 'Find objects by prefix'. Below the search bar is a table with two rows of data:

	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	<a href="#">manifest.json</a>	json	May 30, 2025, 20:31:32 (UTC+00:00)	302.0 B	Standard
<input type="checkbox"/>	<a href="#">netflix_titles.csv</a>	csv	May 26, 2025, 21:51:35 (UTC+00:00)	3.2 MB	Standard

At the bottom of the page, there are links for 'CloudShell', 'Feedback', and copyright information: '© 2025, Amazon Web Services, Inc. or its affiliates.' followed by 'Privacy', 'Terms', and 'Cookie preferences'.



# Create QuickSight account

Amazon QuickSight offers a free 30-day trial, but charges apply afterward based on the edition and user type. Pricing starts at \$9 per user/month for the Standard Edition, with additional costs for features like SPICE storage and Amazon Q.

Opening a QuickSight account usually takes only a few minutes if you already have an AWS account. Creating a new AWS account first may extend the process to about 10–15 minutes.

The screenshot shows the 'Manage users' page in the QuickSight console. The left sidebar lists various account management options: Manage groups, Manage assets, Manage pricing, SPICE capacity, Account settings, Security & permissions (which is selected and highlighted in red), Manage VPC connections, Mobile settings, Domains and Embedding, Account customization, Single sign-on (SSO), and KMS keys. The main content area is titled 'Manage users' and includes a sub-instruction: 'Invite new users, manage roles for users accessing the QuickSight account.' Below this are buttons for 'Invite users' and 'Manage permissions'. A search bar and filters for 'Role: All' and 'Activity: All' are also present. A table displays one user entry:

Username	Email	Role	Permissions	Last active	Action
418272793481	kiliansarsah@gmail.com	Admin		2025-05-30 22:24	

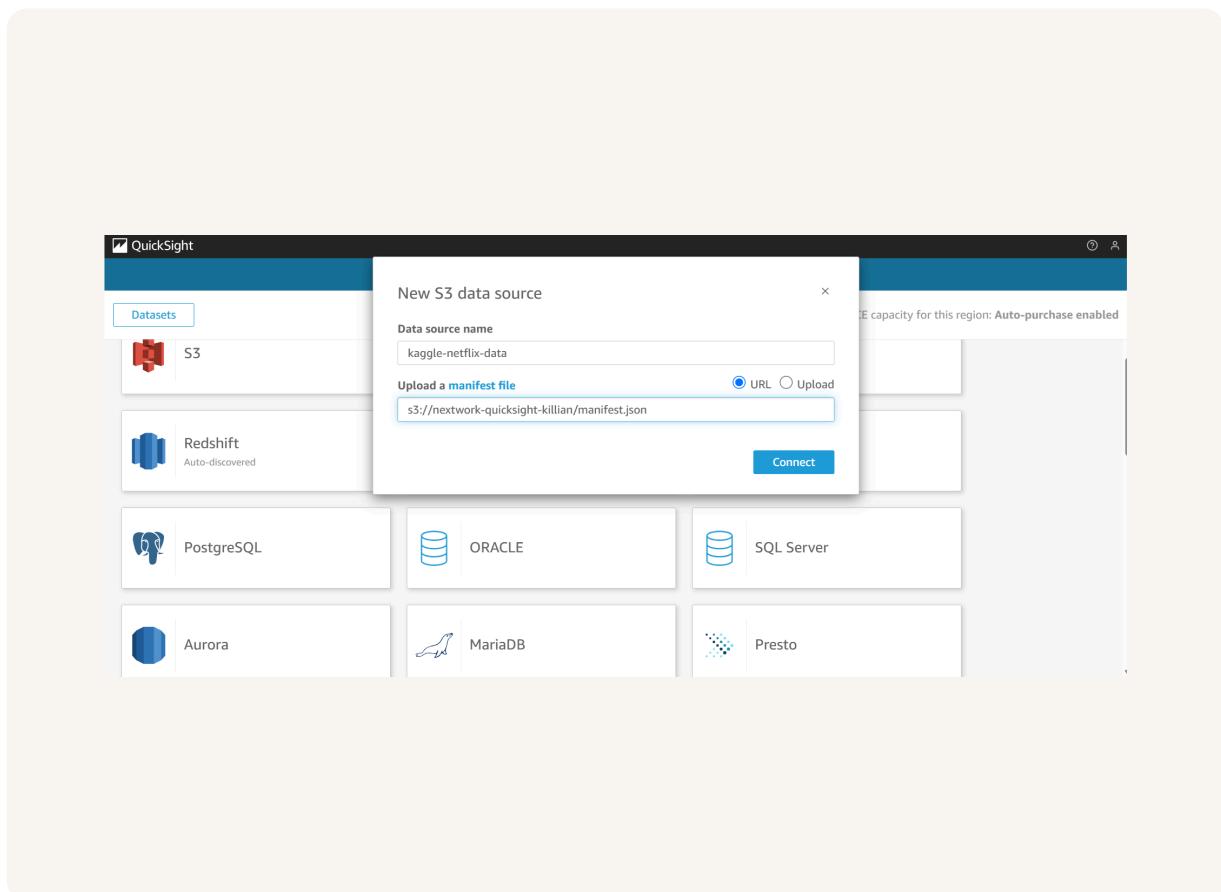
At the bottom of the table, it says 'Showing 1 ~ 1 of 1 users.'



# Download the Dataset

I went to the Datasets page in QuickSight, clicked New dataset, and selected S3. I named the source kaggle-netflix-data and pasted the S3 URL for the manifest.json file to connect my Netflix data for visualization.

The `manifest.json` file tells QuickSight where the dataset is in S3 and how to read it. It provides the file location, format, and structure so QuickSight can correctly import and visualize the data without errors.



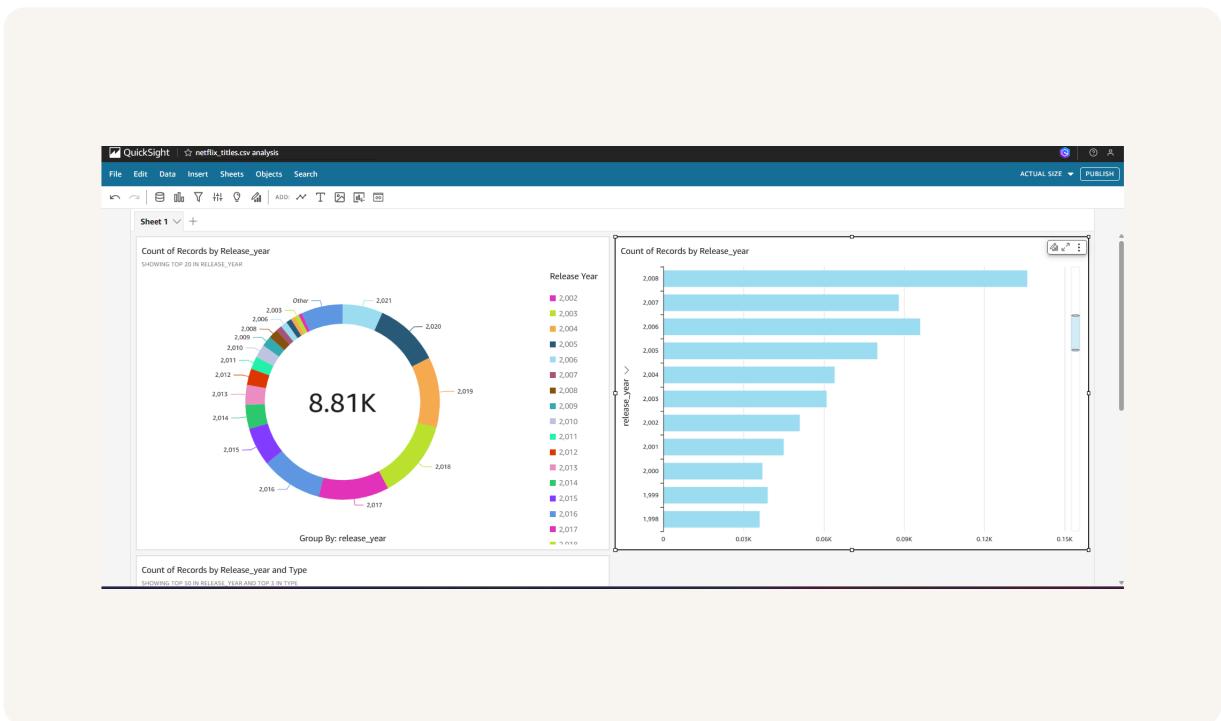


# My first visualization

To create visualizations in QuickSight, choose a dataset, select a visual type like bar or pie chart, then drag fields from the left panel into the graph area. Customize by filtering, sorting, or changing chart types to best represent your data.

The visualization shows Netflix content by release year, split into TV shows and movies. It highlights trends over time, revealing which years had more movies or TV shows, helping analyze Netflix's content distribution and production focus each year.

I created this visualization by dragging \*\*release\\_year\*\* to the Y Axis to show the timeline and \*\*type\*\* to the Group/Color heading to differentiate between TV shows and movies. This setup clearly compares content types by year.

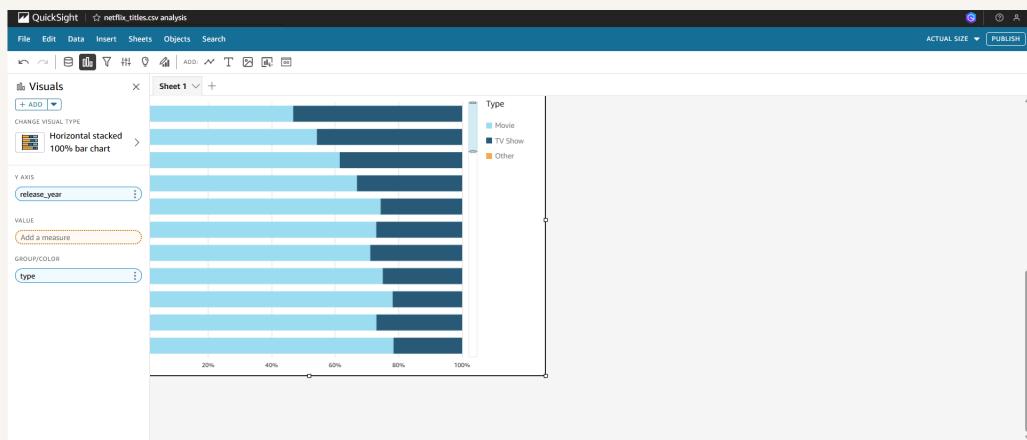




# Using filters

Filters are useful because they let you focus on specific parts of your data, making analysis clearer and more relevant. They help narrow down large datasets to see trends, patterns, or details without distraction from unrelated data.

The visualization shows the count of Netflix TV shows and movies released each year. It breaks down content by type, helping identify trends over time, such as which years had more movies or TV shows, revealing viewing content patterns.

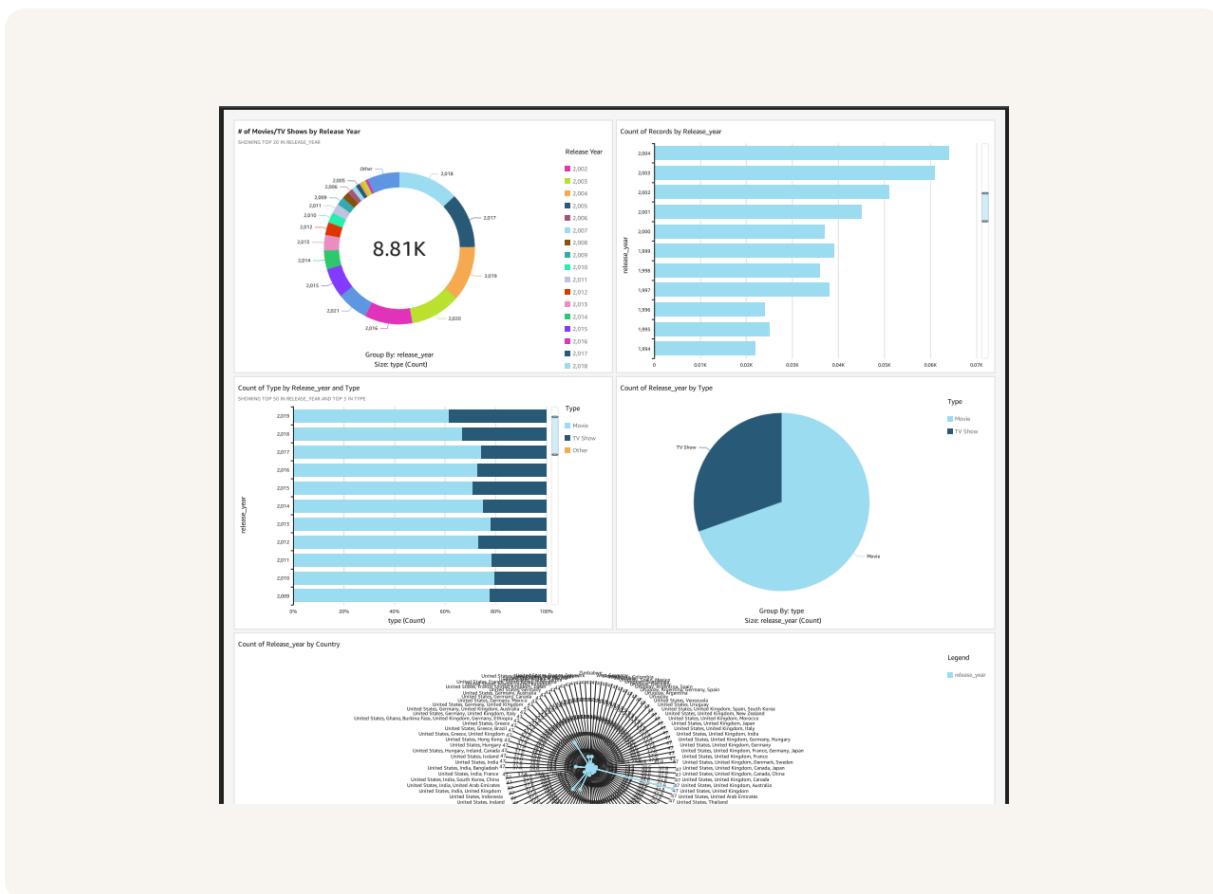




# Setting up a dashboard

As a finishing touch, I added descriptive titles to each visualization for clarity, adjusted the layout for a clean and organized look, and reviewed the data for accuracy before publishing and exporting the dashboard as a PDF.

I exported my QuickSight dashboard as a PDF by clicking the "Share" button in the top-right corner. Then I selected "Export to PDF" from the dropdown menu. After confirming the layout, I downloaded the PDF file for sharing.





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